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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/642,954

08/18/2003

Russell Henry

03-1094

4186

7590

09/07/2006

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EXAMINER

RIZK, SAMIR WADIE

ART UNIT

PAPER NUMBER

2133

DATE MAILED: 09/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/642,954	HENRY, RUSSELL	
	<b>Examiner</b>	<b>Art Unit</b>	
	Sam Rizk	2133	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 12-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,8,10,12 and 18 is/are rejected.
- 7) ☒ Claim(s) 3-7, 13-17, 19 and 20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 8/18/2003.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTIONS**

- Claims 1-10, 12-20 have been submitted for examination
- Claims 1,2, 8, 10, 12 and 18 have been rejected
- Claims 3-7,9,13-17, 19 and 20 are objected to

***Claim Objections***

1. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered.

**When new claims are presented, they must be numbered consecutively**

beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Appropriate correction is required.

2. The Examiner notes that **claim 15 should be depend from claim 10** and not from claim 1 as recited in claim 15. This is analogous to claim 5 that depend from claim 1.

Appropriate correction is required.

3. Claim 19 should read:  
"The system of claim **10** wherein.."

Appropriate correction is required.

***Drawings***

4. Figures 1 & 2 should be designated by a legend such as --Background Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
5. Claims 1-10,12-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kunzinger US patent no. (6931529 (Hereinafter Kunzinger and further in view of Maung et al US patent no. 6981200 (Hereinafter Maung)).
6. In regard to claim 1, Kunzinger teaches:
  - A method for end-to-end data protection in a computer, comprising:
  - associating a virtual end-to-end address with said data integrity field, wherein said virtual end-to-end address transfers encoded information to a controller through at least one address of a read and write request thereof, wherein said encoded information identifies an offending entity within said data path.

(Note: col. 11, lines (10-60) in Kunzinger)

However, Kunzinger does not teach:

- associating a data integrity field with data transferred along a data path in a computer; and

Maung, in an analogous art, that teaches interconnect system with error correction discloses:

- associating a data integrity field with data transferred along a data path in a computer;

(Note: FIG. 2 in Maung)

Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kunzinger with the teaching of Maung to

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include data integrity field (error correction) with data transferred through data links.

This modification would have been obvious to one of ordinary skill in the art, at the time the invention was made, because one of ordinary skill in the art would have recognized the need to repair and correct data in the link I/O path.

7. In regard to claim 2, Kunzinger teaches:

- The method of claim 1 wherein said controller comprises a memory controller of said computer.

(Note: FIG. 1, reference sign (12) in Kunzinger)

8. In regard to claim 8, Kunzinger teaches;

- The method of claim 1 further comprising locating a buffer address within a local memory associated with said controller.

(Note: FIG. 1, reference sign (12) in Kunzinger)

9. Claim 10 is rejected for the same reasons as per claim 1.

10. Claim 12 is rejected for the same reasons as per claim 2.

11. Claim 18 is rejected for the same reasons as per claim 8.

***Allowable Subject Matter***

12. Claims 3-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

**REASONS FOR ALLOWANCE**

The following is an examiner's statement of reasons for allowance:

13. The prior Art of record and, in particular Kunzinger and Ming teaches substantially all the limitations in claim 1

However, the prior art do not teach, suggest, or otherwise render obvious:

- The method of claim 1 further comprising configuring said virtual end-to-end address to further comprise at least one index and at least offset, wherein said at least **one index and said at least one offset** can each be varied in size to match a requirement of said controller of said computer.

As per claim 3.

- The method of claim 1 further comprising configuring said virtual end-to-end address to further comprise at least one **end-to-end bit**, which is recognizable by said controller.

As per claim 4.

- The method of claim 1 further comprising associating an end-to-end access list with said virtual end-to-end address, wherein said end-to-

end access list contains at least one entry for every data transfer request provided to an interface device.

As per claim 5.

- The method of claim 1 further comprising configuring said data integrity field to include at least one reference tag, at least one meta tag and at least one guard field, wherein said at least one meta tag comprises a static value and said at least one reference tag comprises an incrementing value.

As per claim 9.

14. Claims (6 and 7) depend from claims 1.
15. Claim 13 has similar language as in claim 3.
16. Claim 14 has similar language as in claim 4.
17. Claim 15 has similar language as in claim 5.
18. Claims (16 and 17) depend from claim 15.
19. Claim 19 has similar language as in claim 9.
20. Claim 20 has similar language as in claim 1.



***Conclusion***

21. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- Kunzigner US patent no. 6986061 teaches integrated system for network layer security and fine-grained identity based access control.
  - Agrawal et al. US patent no. 7096359 teaches authentication scheme for ad hoc and sensor wireless networks.
  - Deng et al. US patent no. 6701432 teaches firewall including local bus.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sam Rizk whose telephone number is (571) 272-8191. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on (571) 272-3819. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

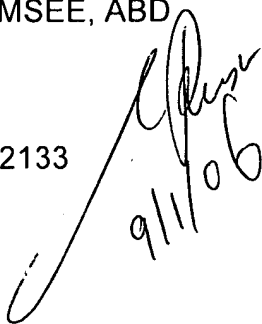
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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronics Business Center (EBC) at 866-217-9197 (toll-free)

Sam Rizk, MSEE, ABD

Examiner

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9/11/06



GUY LAMARRE  
PRIMARY EXAMINER